Assessment tools to evaluate risk for falls

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Common Misconception

Which tool do I use?

The Best Fall Risk Tools

Results

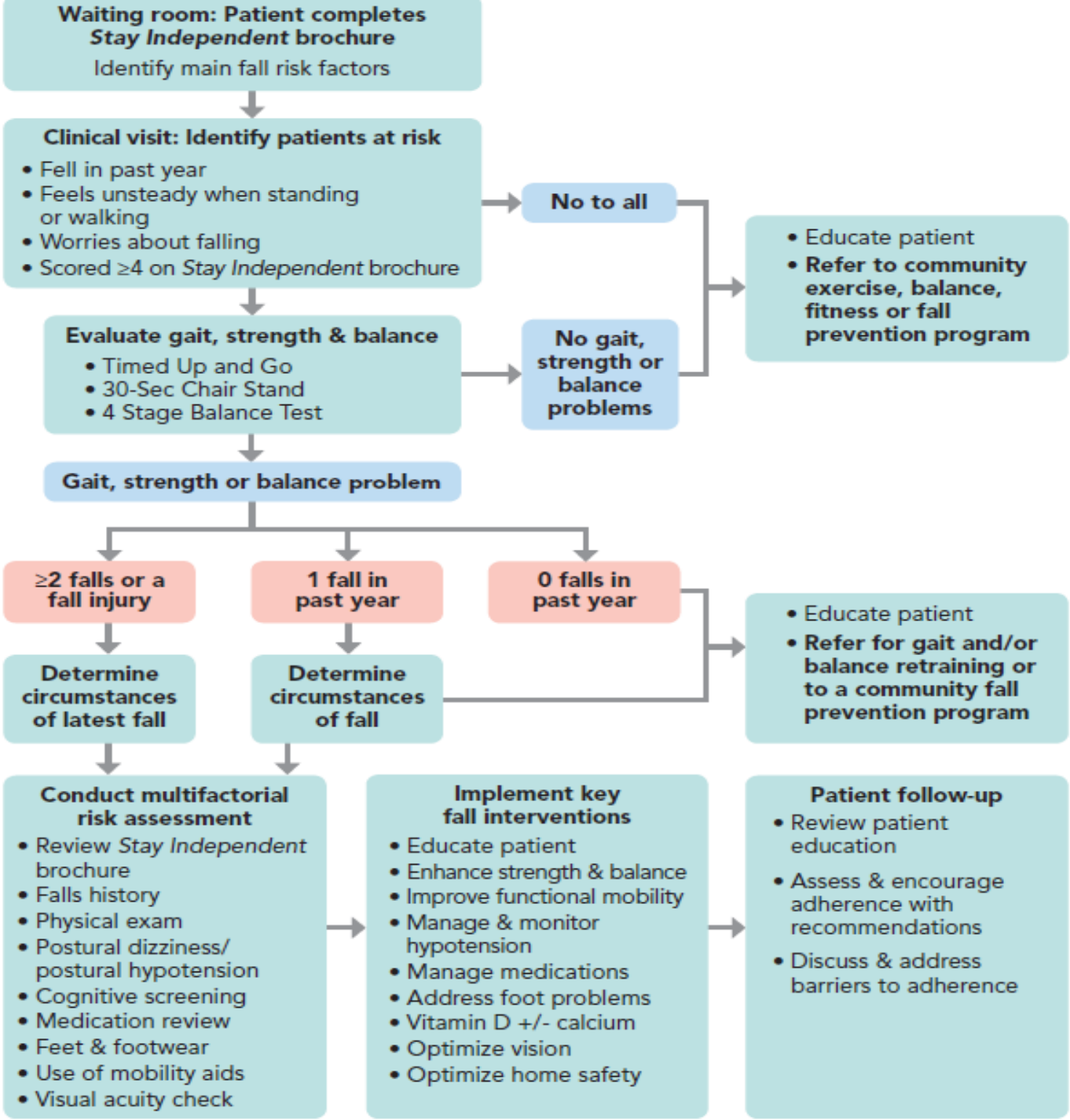
- Reliable and Accurate,
- Easy to Administer,
- Quick to Use,
- Consistent Assessments,
- Accurate Targeting of Interventions,
- Identified up to 80% of Fallers.

Variables		Score
1. History of falling	no yes	0 25 ____
2. Secondary diagnosis	no yes	0 15 ____
3. Ambulatory aid		
- None / bed rest / nurse assist		0
- Crutches / cane / walker		15
- Furniture		30 ____
4. IV or IV Access	no yes	0 20 ____
5. Gait		
- Normal / bed rest / wheelchair		0
- Weak		10
- Impaired		20 ____
6. Mental status		
- Oriented to own ability		0
- Overestimates or forgets limitations		15 ____

STEADI
Stopping Elderly
Accidents, Deaths & Injuries

STOPPING ELDERLY ACCIDENTS AND DEATHS

- Contains resources and tools that will help make fall prevention an integral part of your clinical practice.
- User friendly
- Evidenced based tools
- Based on a simple algorithm


Waiting room: Patient completes Stay Independent brochure
Identify main fall risk factors
Clinical visit: Identify patients at risk
• Fell in past year
• Feels unsteady when standing or walking
• Worries about falling
• Scored ≥4 on Stay Independent brochure
No to all
Evaluate gait, strength & balance
• Timed Up and Go
• 30-Sec Chair Stand
• 4 Stage Balance Test
No gait, strength or balance problems
• Educate patient
• Refer to community exercise, balance, fitness or fall prevention program
Gait, strength or balance problem
≥2 falls or a fall injury
1 fall in past year
0 falls in past year
Determine circumstances of latest fall
Determine circumstances of fall
• Educate patient
• Refer for gait and/or balance retraining or to a community fall prevention program
Conduct multifactorial risk assessment
• Review Stay Independent brochure
• Falls history
• Physical exam
• Postural dizziness/ postural hypotension
• Cognitive screening
• Medication review
• Feet & footwear
• Use of mobility aids
• Visual acuity check
Implement key fall interventions
• Educate patient
• Enhance strength & balance
• Improve functional mobility
• Manage & monitor hypotension
• Manage medications
• Address foot problems
• Vitamin D +/- calcium
• Optimize vision
• Optimize home safety
Patient follow-up
• Review patient education
• Assess & encourage adherence with recommendations
• Discuss & address barriers to adherence

Patient: Date: Time: AM/PM

The Timed Up and Go (TUG) Test

Purpose: To assess mobility

Equipment: A stopwatch

Directions: Patients wear their regular footwear and can use a walking aid if needed. Begin by having the patient sit back in a standard arm chair and identify a line 3 meters or 10 feet away on the floor.

Instructions to the patient:

When I say **"Go,"** I want you to:

1. Stand up from the chair
2. Walk to the line on the floor at your normal pace
3. Turn
4. Walk back to the chair at your normal pace
5. Sit down again

On the word **"Go"** begin timing.

Stop timing after patient has sat back down and record.

Time: _____ **seconds**

An older adult who takes ≥12 seconds to complete the TUG is at high risk for falling.

Observe the patient's postural stability, gait, stride length, and sway.

Circle all that apply: ■ Slow tentative pace ■ Loss of balance ■ Short strides ■ Little or no arm swing ■ Steadying self on walls ■ Shuffling ■ En bloc turning ■ Not using assistive device properly

Notes:

For relevant articles, go to: **www.cdc.gov/injury/STEADI**

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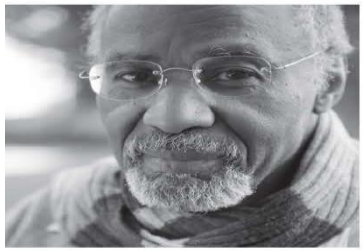


Patient: Date: Time: AM/PM

The 30-Second Chair Stand Test

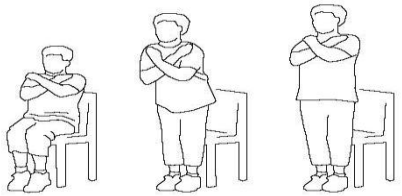
Purpose: To test leg strength and endurance

Equipment:

- A chair with a straight back without arm rests (seat 17" high)
- A stopwatch

Instructions to the patient:

1. Sit in the middle of the chair.
2. Place your hands on the opposite shoulder crossed at the wrists.
3. Keep your feet flat on the floor.
4. Keep your back straight and keep your arms against your chest.
5. On **"Go,"** rise to a full standing position and then sit back down again.
6. Repeat this for 30 seconds.



On **"Go,"** begin timing.

If the patient must use his/her arms to stand, stop the test. Record "0" for the number and score.

Count the number of times the patient comes to a full standing position in 30 seconds.

If the patient is over halfway to a standing position when 30 seconds have elapsed, count it as a stand.

Record the number of times the patient stands in 30 seconds.

Number: _____ **Score** _____ **See next page.**

A below average score indicates a high risk for falls.

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Chair Stand-Below Average Scores

Age	Men	Women
60-64	<14	<12
65-69	<12	<11
70-74	<12	<10
45-79	<11	<10
80-84	<10	<9
85-89	<8	<8
90-94	<7	<4

Patient: Date: Time: AM/PM

The 4-Stage Balance Test

Purpose: To assess static balance

Equipment: A stopwatch

Directions: There are four progressively more challenging positions. Patients should not use an assistive device (cane or walker) and keep their eyes open.

Describe and demonstrate each position. Stand next to the patient, hold his/her arm and help them assume the correct foot position.

When the patient is steady, let go, but remain ready to catch the patient if he/she should lose their balance.

If the patient can hold a position for 10 seconds without moving his/her feet or needing support, go on to the next position. If not, stop the test.

Instructions to the patient: I'm going to show you four positions.

Try to stand in each position for 10 seconds. You can hold your arms out or move your body to help keep your balance but don't move your feet. Hold this position until I tell you to stop.

For each stage, say "**Ready, begin**" and begin timing.
After 10 seconds, say "**Stop.**"

See next page for detailed patient instructions and illustrations of the four positions.

For relevant articles, go to: **www.cdc.gov/injury/STEADI**

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4 Stage Balance Test

Instructions to the patient:

1. Stand with your feet side by side. **Time:** _____ **seconds**

2. Place the instep of one foot so it is touching the big toe of the other foot. **Time:** _____ **seconds**

3. Place one foot in front of the other, heel touching toe. **Time:** _____ **seconds**

4. Stand on one foot. **Time:** _____ **seconds**

An older adult who cannot hold the tandem stance for at least 10 seconds is at increased risk of falling.

Notes:

Patient: Date: Time: AM/PM

Measuring Orthostatic Blood Pressure

1. Have the patient lie down for 5 minutes.
2. Measure blood pressure and pulse rate.
3. Have the patient stand.
4. Repeat blood pressure and pulse rate measurements after standing 1 and 3 minutes.

A drop in bp of ≥20 mm Hg, or in diastolic bp of ≥10 mm Hg, or experiencing lightheadedness or dizziness is considered abnormal.

Position		Time	BP	Associated Symptoms
Lying Down		5 Minutes	BP _____ / _____ HR _____	
Standing		1 Minutes	BP _____ / _____ HR _____	
Standing		3 Minutes	BP _____ / _____ HR _____	

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Wrap up

- **Find a RITUAL**
- **R**eview self-assessments
- **I**dentify risk factors
- **T**est gait and balance
- **U**ndertake various assessments
- **A**pply interventions
- **L**ater, follow-up

Website for the STEADI toolkit

http://www.cdc.gov/homeandrecreationalsafety/Falls/steadi/index.html#practice

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